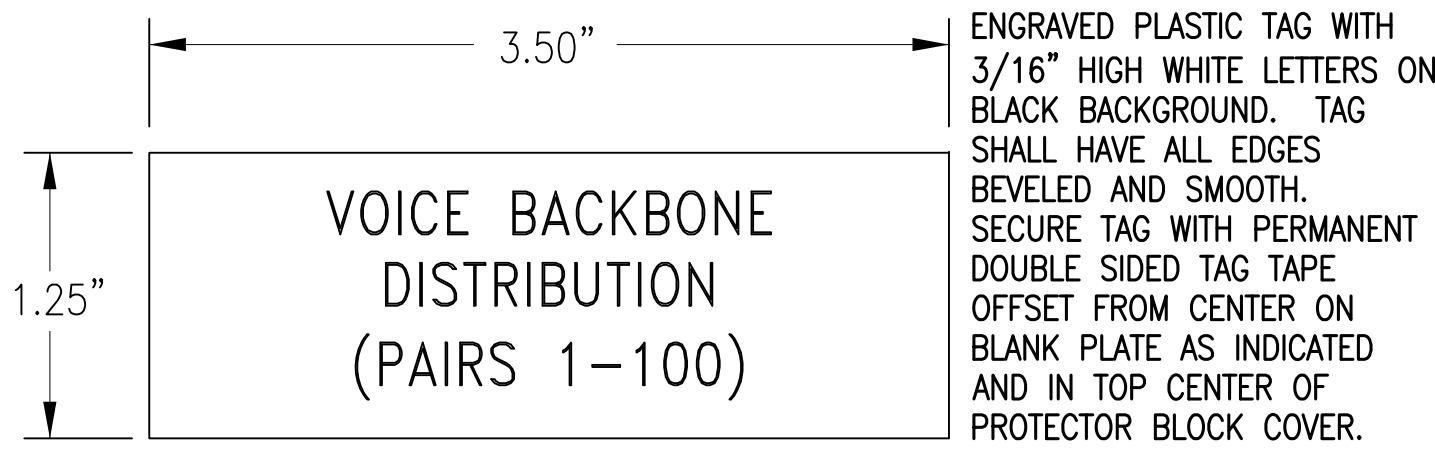


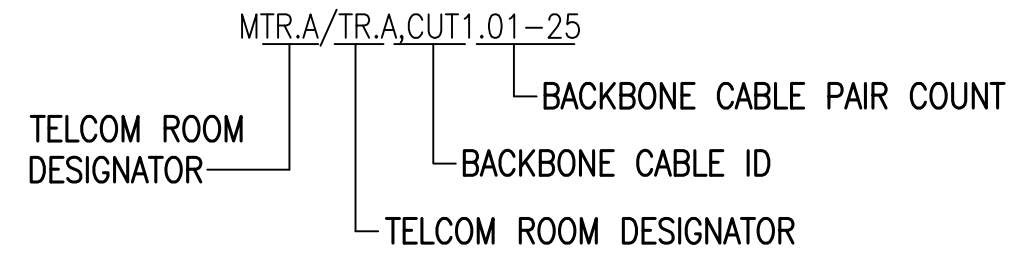
CATEGORY 6 TERMINATION NOTE:

MAKE ALL TERMINATIONS IN STRICT ACCORDANCE WITH TIA GUIDELINES AS WELL AS THE MANUFACTURER'S PRINTED INSTRUCTIONS FOR BOTH THE CABLE AND THE TERMINATION DEVICE FOR ALL FIELD CONNECTIONS IN THE "HORIZONTAL TELECOMMUNICATIONS LINK". STRIP CABLE JACKET BACK A MAXIMUM OF 1 INCH FROM THE POINT OF TERMINATION. MAINTAIN FACTORY SYMMETRICAL CABLE TWISTS TO WITHIN 0.5 INCHES (13 MM MAXIMUM) OF THE POINT OF TERMINATION. PROVIDE CABLE SLACK AT EACH END TO ALLOW MINIMUM OF FIVE (5) FUTURE RETERMINATIONS WITHOUT RE-ROUTING CABLE. SEE CO MOUNTING DETAILS, BACKBOARD ELEVATIONS, AND CP DETAILS.



TYPICAL VOICE BLOCK ENGRAVED TAG DETAIL

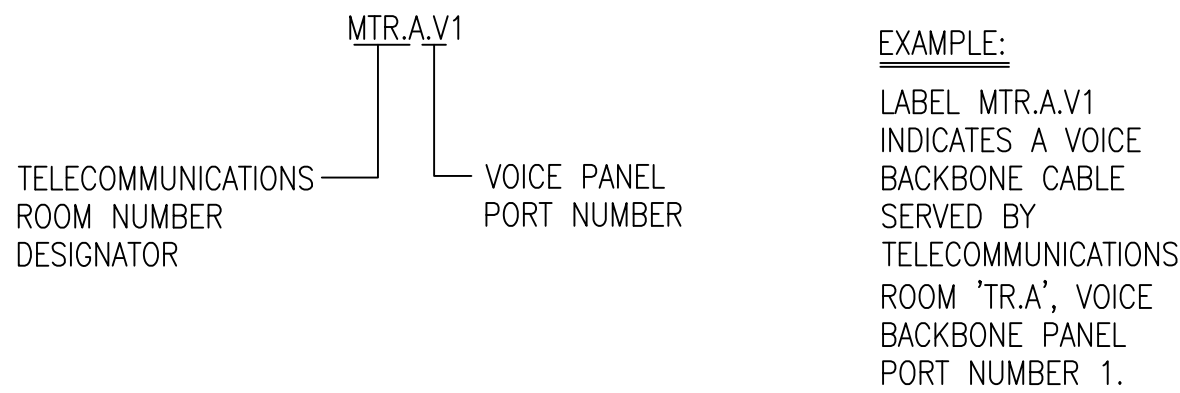
TELEPHONE BACKBONE NOMENCLATURE



BACKBONE CABLE LABELING

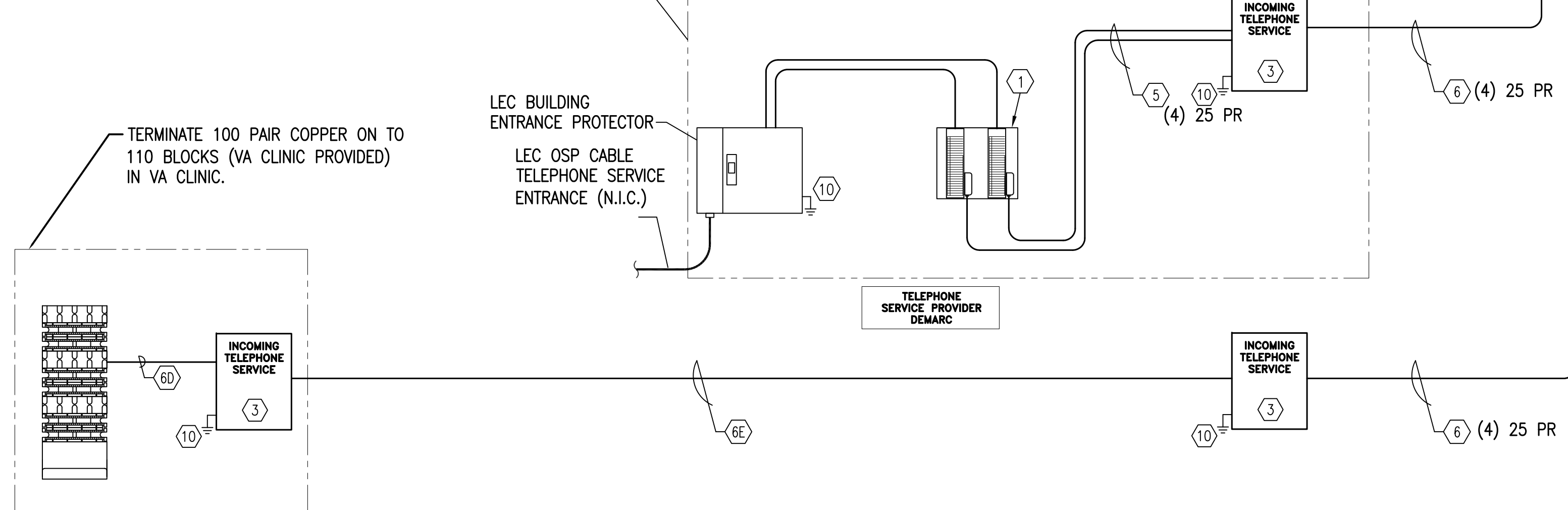
LABEL ALL BACKBONE CABLES WITHIN 12" OF CABLE BREAKOUT POINT WITH PERMANENT MYLAR WRAP WRITE-ON MARKERS.
NAME FORMULA = BUILDING NUMBER - ROOM NUMBER/ BUILDING NUMBER - ROOM NUMBER, CABLE ID (CUT = COPPER UNTWISTED, 1 = CABLE NUMBER), PAIR COUNT = 001-200 FOR THAT CABLE.

VOICE BACKBONE PATCH PANEL NOMENCLATURE



EXAMPLE:
LABEL MTR.A.V1 INDICATES A VOICE BACKBONE CABLE SERVED BY TELECOMMUNICATIONS ROOM 'MTR.A', VOICE BACKBONE PANEL PORT NUMBER 1.

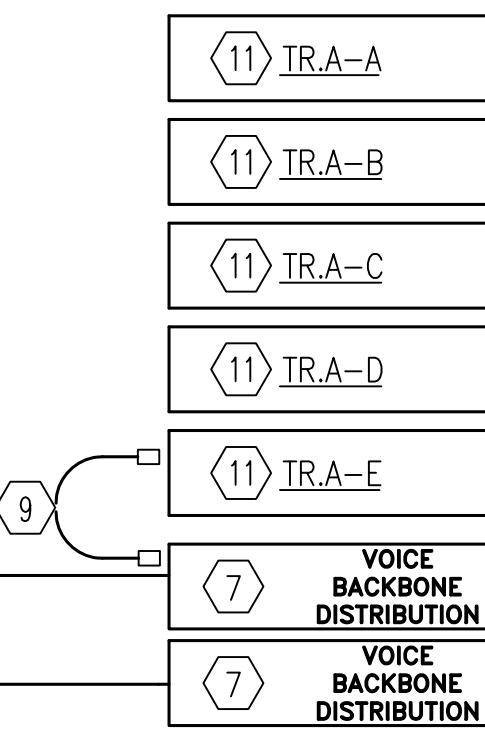
COORDINATE FINAL DEMARC LAYOUT AND CABLING REQUIREMENTS WITH OWNER, PBX PROVIDER, AND SERVICE PROVIDER PRIOR TO INSTALLATION.



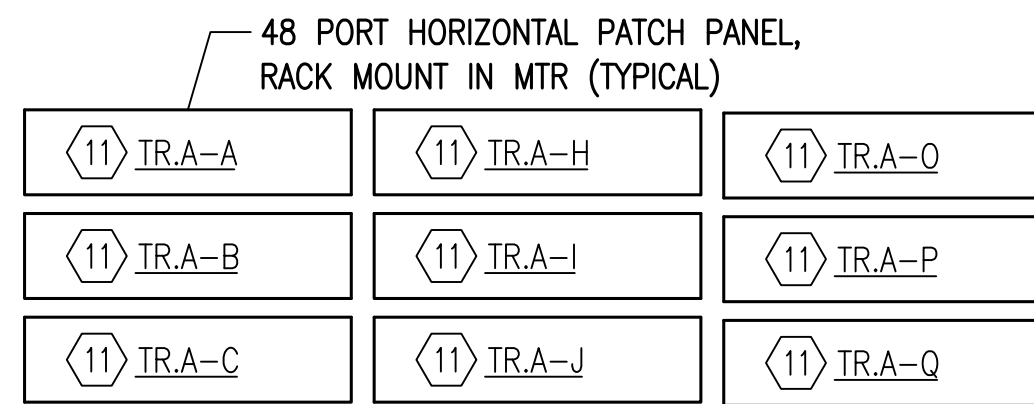
NAVY TR.A

TELECOMMUNICATIONS ROOM MTR.A

1 VOICE SYSTEM SINGLE LINE DIAGRAM

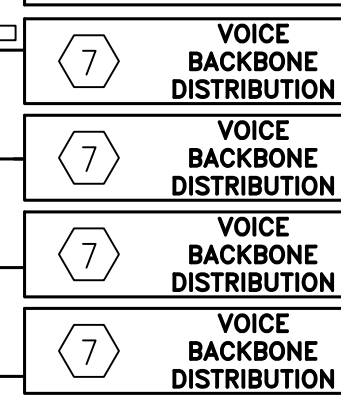


TELECOMMUNICATIONS ROOM TR.B

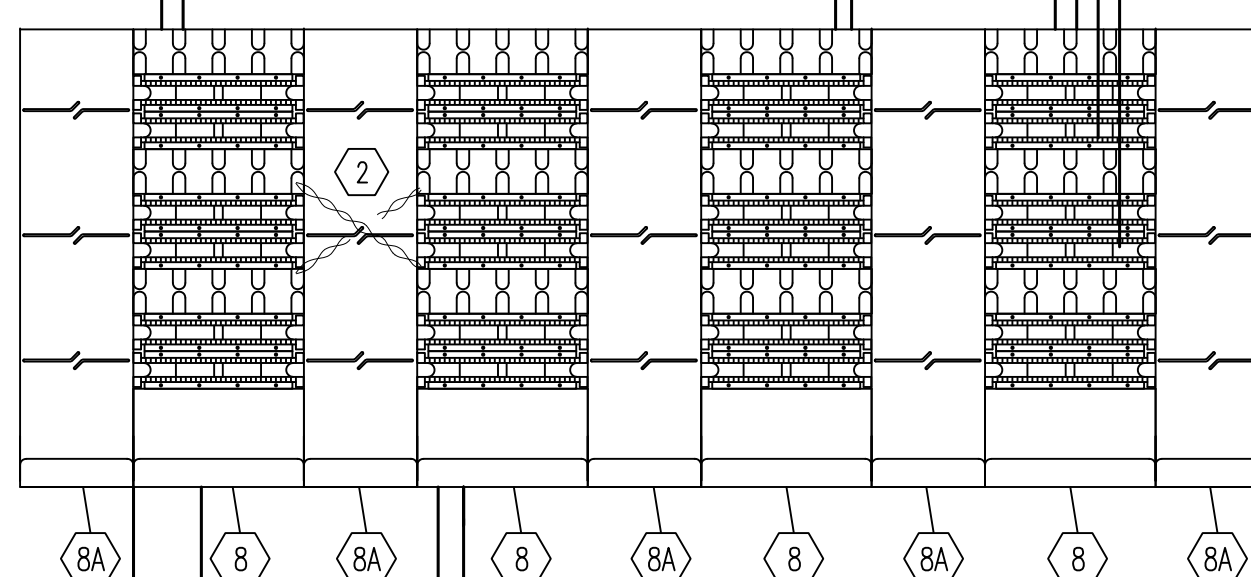


(8) 25 PAIR CABLES

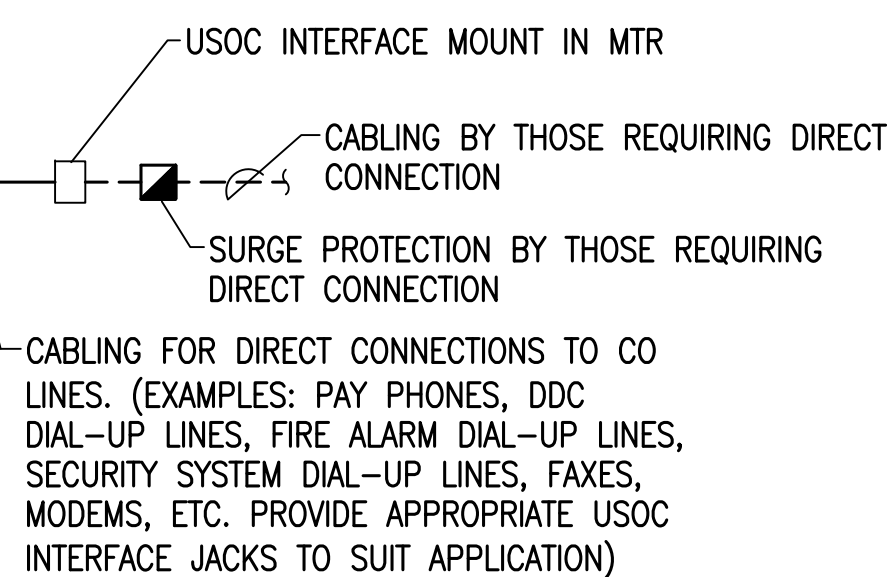
WHITE (9)



(6B) (16) 25 PAIR CABLES



(8A) (8) (8A) (8) (8A) (8) (8A) (8)



CODEBLUE INTERACT 501-S, FLUSH MOUNTED, SINGLE BUTTON INTERCOMMUNICATIONS PHONE. REFER TO FLOOR PLANS FOR LOCATIONS

VOICE SYSTEM SINGLE LINE KEY NOTES

- TELEPHONE DEMARC LEC NETWORK INTERFACE JACKS 66 BLOCKS (N.I.C.)
- SYSTEM CROSS-CONNECTS (BY TELEPHONE SYSTEM PROVIDER), 24 AWG SOLID COPPER CONDUCTORS, BLUE/WHITE. CONTRACTOR RUN NEATLY IN 66 BLOCK ORGANIZER RINGS AND WHITE BACKBOARDS FOR A PROFESSIONAL INSTALLATION.
- PROVIDE PRIMARY PROTECTOR UNIT WITH SOLID STATE PROTECTOR MODULES, ONEAC OR EQUAL. GROUND TO BACKBOARD WITH #6 AWG GROUNDING CONDUCTOR.
- OFOI: TELEPHONE PHONE SYSTEM.
- 25 PAIR CATEGORY 5E RATED TELEPHONE BACKBONE CABLE, COLOR GREY. CUSTOM LENGTH, PUNCH ONE END DOWN ON 66 BLOCK, FIELD CONNECTORIZE OTHER END ON PROTECTOR BLOCK.
- 25 PAIR CATEGORY 5E TELEPHONE CABLE, CMR (RISER) JACKET, CUSTOM LENGTH, PUNCH ONE END DOWN ON PROTECTOR BLOCK UPPER (OUTPUT) 110 BLOCK. PUNCH OTHER END DOWN ON 110 BLOCK.
- 25 PAIR CATEGORY 5E PATCH PANEL INTERCONNECT CABLE, CMR JACKET, COLOR GREY, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 1110 BLOCK AND THE OTHER END ON PATCH PANELS IN USOC PIN CONFIGURATION.
- 25 PAIR CATEGORY 5E TELEPHONE CABLE, CMR (RISER) JACKET, COLOR GREY, CUSTOM LENGTH, PUNCH ONE END DOWN ON 110 BLOCK, FIELD CONNECTORIZE OTHER END ON PBX.
- 100 PAIR CATEGORY 3 TELEPHONE BACKBONE CABLE, CMR JACKET, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 110 BLOCKS AND THE OTHER END ON THE PROTECTOR BLOCKS
- 100 PAIR CATEGORY 3 TELEPHONE OUTDOOR RATED BACKBONE CABLE, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 110 PROTECTOR BLOCKS IN VA CLINIC AND THE OTHER END ON PROTECTOR BLOCKS AS SHOWN.
- 48 PORT VOICE BACKBONE ANGLED PATCH PANELS, CATEGORY 5e, WITH (48) EIGHT PIN MODULAR JACKS, EACH WITH ONE PAIR USOC WIRING PINOUT. PROVIDE WITH TELEPHONE ICON TABS, COLOR GREY. TERMINATE ALL PAIRS IN ORDER AND LABEL EACH PORT WITH PAIR NUMBERS. TERMINATE 25 PAIR VOICE BACKBONE CABLE IN MODULAR CATEGORY 5e PATCH PANEL. TERMINATE PAIR IN ORDER WITH (1) PAIR FOR EVERY MODULAR PORT (I.E. PAIR 2 ON PORT 1, PAIR 4 ON PORT 2, ETC.), 25 PAIR BACKBONE CABLE WILL BE USED FOR EACH VOICE PATCH PANEL. SEE "TYPICAL VOICE PATCH PANEL MODULAR JACK (USOC/TIA568A) PIN CONFIGURATION".
- 110 CROSS-CONNECT BLOCK DISTRIBUTION FRAME, 300 PAIR EACH FRAME, 4 PAIR CONNECTING BLOCKS FOR TERMINATION. PROVIDE FULLY LOAD WITH 110 BLOCKS AND HORIZONTAL WIRE MANAGEMENT. AMP P/N 569854-1 OR EQUAL.
- 110 DISTRIBUTION FRAME VERTICAL WIRE MANAGEMENT FRAME. PROVIDE COMPLETE WITH RINGS AS REQUIRED. AMP P/N 569851-1 OR EQUAL. PROVIDE MATCHED TO 110 FRAME.
- EQUIPMENT ROOM VOICE PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6 (MINIMUM) FOUR PAIR 100-OHM UNSHIELDED TWISTED PAIR (UTP) CABLE WITH 24 GAUGE STRANDED COPPER CONDUCTORS, COLOR WHITE. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS WITH NO BOOT. FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. REFER TO PATCH CORD SCHEDULE, FOR QUANTITIES. PROVIDE DOCUMENTATION OF FACTORY TESTING CATEGORY 6 REQUIREMENTS AT SUBMITTAL.
- SOLID COPPER INSULATED GROUNDING CONDUCTOR, #6 AWG. FOR GROUNDING AT MTR AND TR LOCATIONS, ROUTE TO BACKBOARD MOUNTED VOICE GROUNDING BUSBAR.
- TIA CATEGORY 6 HORIZONTAL WIRING ANGLED PATCH PANELS, 48 PORT, TIA 568A PINOUT. PROVIDE WITH MODULAR JACKS AND FACTORY ICON/LABEL HOLDERS, DESIGNATION LABELS, REAR CABLE MANAGERS, AND MOUNTING HARDWARE. PROVIDE COLORED SNAP-IN BLANK TAB FOR EACH MODULAR JACK, COLOR TO MATCH CORRESPONDING JACK IN CO. SEE "HORIZONTAL PATCH PANEL LABELING NOTES" FOR TERMINATION SEQUENCE, ROW LABELING, AND IDENTIFICATION TAG.
- TIA CATEGORY 6 HORIZONTAL WIRING, 4 PAIR UTP, 24 GAUGE SOLID COPPER CONDUCTORS. SEE APPROVED LIST THIS SHEET. ALL CABLE MUST HAVE THE WORDS "UL VERIFIED CATEGORY 6" STAMPED ON THE OUTER INSULATION JACKET. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR WHITE.
- TELECOMMUNICATIONS OUTLET (CO) WITH CATEGORY 6, 8-PIN MODULAR JACKS FOR DATA AND VOICE CONNECTIONS. SEE OUTLET DETAILS.
- WORKSTATION PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6 (MINIMUM) FOUR PAIR 100-OHM UNSHIELDED TWISTED PAIR (UTP) CABLE WITH 24 GAGE STRANDED COPPER CONDUCTORS, COLOR GRAY. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, PROVIDE FACTORY-MADE PATCH CORDS WITH NO BOOT. FIELD BUILT OR CONTRACTOR SHOP ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED.



FINAL SUBMISSION

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Revisions		Date		Approved Project Director		Location PANAMA CITY, FLORIDA		Building Number -		Department of Veterans Affairs	
DATE MARCH 2012		CHECKED TAN		DRAWN CEC		Drawing Number TN602		Dwg 10 of 14			